THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. IX.] WEDNESDAY, AUGUST 21, 1833. [NO. 2.

DROPSY AND GANGRENE.

Cases of Dropsy and Gangrene occurring in a Family who had subsisted for some time on unwholesome Potatoes, with Remarks. By ALEXANDER PEDDIE, Esq. Surgical Hospital.

CASE I.—On the 13th December 1832, I was requested to visit Mary Clapperton, ætat. 19 months, at the Causewayside, as an out-door patient of the Edinburgh Surgical Hospital. On her left cheek, half way between the mouth and angle of the jaw, there was a portion of integument of the size of a half-crown piece, dark, pulpy, and exhaling a fetid smell. Over the cheek and the greater part of the anterior surface of the neck, the parts were much swelled, very hard, and of a deep red color; some parts, especially in the immediate vicinity of the sore, having a yellowish tinge, and others a bluish black appearance. The child had a dull listless aspect, a loaded tongue, and a quick feeble pulse.

The parents stated, that a few weeks before, she had had a mild attack of scarlet fever, the rash of which extended merely over the chest, and receded in the course of a day. A small hard swelling then appeared a little below the present sphacelated part, and after some blood was abstracted from it by leeching, the appearances just described were gradually displayed. On questioning the parents as to the kind of food used by the patient, they assured me that it was perfectly wholesome.

I immediately removed the mortified part, and found a considerable cavity underneath, and the integuments undermined in every direction, apparently extending nearly to the limits of the external appearances already described. The *Unguentum Resinosum*, with an equal part of the *Oleum Terebinthinæ*, covered by a poultice, was applied to the sore; and this dressing was removed four times a day. I directed also that a purgative should be taken immediately, and that the child's strength should be supported by a liberal allowance of wine. In consequence of the above dressings to the sore, the application of the *Tinctura Saponis c. Opio* to the surrounding parts, and the exhibition of wines—of which about one gill was taken daily—in a few days the greater bulk of the swelling had diminished, the parts assumed a healthy color, the ulcer showed a good healing surface, and the patient appeared lively. The wine was now withdrawn; sago provided as a diet; and a lotion of the sulphate of zinc, with a compress and bandage, applied to the parts. Under this treatment the ulcer was completely cicatrized by the 12th of January, and the patient was perfectly healthy.

CASE II.—Alexander Clapperton, ætat. 6, was also seen by me on the 13th December. I found him sitting by the fire propped up with

pillows; his face pale and bloodless, much swollen, particularly about the eyelids, and having a dull languid expression. His abdomen was tumid, the inferior extremities œdematous and hot on the surface, although the patient was exquisitely sensible to impressions of cold. His breathing was soft but hurried, and at times interrupted; and on auscultation the respiratory sound was much less distinct than usual. His pulse was small and rapid; tongue pale; breath fetid; urine scanty, and high-colored; and his stools dark and offensive. On inquiry I found that he had been complaining much for ten days, during the few last of which he had been unable to lie in bed; and that about six weeks previously he had had an attack of scarlatina, in which the rash had been perfect, and his recovery easy. I desired him to have some purgative medicine immediately, and then pills containing calomel and squills, one to be taken every seven or eight hours.

14th. Rather worse. Breathing more laborious; fluctuation perceptible in the abdomen; and the œdema of the inferior extremities so great as to render the integuments tense and shining. Frictions with the tartrate of antimony ointment to be employed over the abdomen and chest, the calomel and squills to be continued, and to have a solution of the supertartrate of potass for drink.

15th. There is no improvement. Prescriptions continued.

16th. Worse in every respect. Suffocation frequently threatened. Pulse excessively quick, and extinguishable on the slightest pressure. To have wine occasionally, and two grains of the sulphate of quinine repeated twice in the day.

17th. Died.

On inspection of the body two days after death, the following appearances were observed. Great bloodlessness of the whole body. Strong general adhesions in the chest. The right lung displaced, and much compressed, by about two pounds and a half of clear fluid. The lung itself more fleshy than natural, and on the tip of its superior lobe a considerable deposition of lymph, in the form of a yellow transparent jelly. The left lung more natural in appearance. The mucous membrane of the *trachea* and larger *bronchia* thickened, softened, and extremely vascular. The cellular substance of the anterior *mediastinum* very much infiltrated with serum. A small quantity of serum in the *pericardium*. The heart pale, and containing in both ventricles large *polypi*. The abdomen exhibited evident marks of an inflammatory action, with dropsical effusion to a considerable extent.

Case III.—Agnes Clapperton, ætat. 4, began to complain on the 17th December, the day of her brother's death. At first, the symptoms were languor, loss of appetite, costive bowels, tumid abdomen, œdematous legs, and scanty urine. In a few days these were succeeded by *pyrexia*, and afterwards by nearly the same dropsical appearances as have been described in the case of her brother, and also by the same termination on the 29th December. The treatment was somewhat different from that pursued in the former case. As the disease was seen from its commencement, bleeding and cathartics were resorted to on the first manifestation of febrile symptoms, and succeeded by the use of calomel and

squills, the supertartrate of potass, a blister, and, in the last stage, wine and the sulphate of quinine.

On dissection thirty hours after death, the appearances were these :— In the *thorax* considerable adhesions ; about twelve ounces of serum effused into the right side, and eight ounces on the left ; great hepatization (the red hardening of Andral) of both lungs ; the mucous membrane of the air-vessels very vascular ; and the heart extremely pale, and containing in its right auricle a large *polypus*. In the *abdomen*, a very considerable quantity of fluid effused ; the liver much enlarged ; a large *polypus* in the *vena hepatica* ; the gall-bladder very œdematous, there being nearly a quarter of an inch in distance between its coats ; the covering of the kidneys thickened, but they themselves natural, with the exception of a very slightly speckled appearance externally, and being rather softer than usual internally ; portions of the intestines very vascular, particularly near the termination of the *ileum*, where also there were several tubercles, and a slight ulceration ; the mesenteric glands, especially in this neighborhood, most extensively diseased, being of various sizes, from that of a pea to a walnut, some of them solid, others containing a fluid resembling light-colored pus ; and the glands of Peyer in many parts very large and excavated.

In perusing these cases, the reader may be inclined to think that the dropsies and the gangrenous sore may naturally be explained by a previous attack of *scarlatina*. In this way I accounted for the first two cases. But on learning from the parents of Agnes Clapperton that she had not had the slightest symptom of scarlet fever while Mary and Alexander had it, I was compelled to seek for another cause to resolve the mystery. For a week after A. C. was taken ill, I could obtain no satisfaction. Although I could perceive that the family were in a state of extreme destitution—that every member of it had a most unhealthy aspect—yet my inquiries as to bad food were always met with an assurance that they had been living on nothing but what was perfectly wholesome. A neighbor of the family, to whom I next applied for information, hinted the probability of bad potatoes being the cause of the evil, as she knew for certain that the Clappertons had lately been subsisting almost entirely on such. I now renewed my efforts to ascertain the truth, and having directly charged the parents of the family with the use of this unwholesome diet, I obtained the following confession, apparently at much expense of feeling.

That for some time past the father had been out of employment, in consequence of which his family were left perfectly destitute ; and having too much pride to beg, and seeing starvation before them, they went to the fields, and gathered those potatoes which are exposed on the surface of the ground, and which are uniformly rejected by the farmer as utterly unfit for human use. That the potatoes in question were frosted,* were watery in consistence, some of them of a green, and others

* These potatoes, it may be necessary to explain, lie on the surface of the ground, and are exposed to the influence of the sun through the day, and to frost during night. Some conceive that frost effects a *chemical* change in the constituents of the potatoe root, by converting its mucilage into sugar, from which acetic acid is speedily formed, and putrefaction induced. Others, again, consider that the watery part of the potatoe is converted into ice, which, occupying a larger space, separates the solid parts farther from each other, and produces, in consequence, a partial mechanical disorganization of structure.

of a deep purple color, and all of them having an excessively bitter taste. That in gathering these potatoes from the field, they often met with people similarly employed, but did not think that any of them did so for the purpose of human food, but were merely obtaining them for pigs—indeed, they had never heard of any one eating such potatoes. That this had been their aliment for upwards of six weeks previous to the beginning of December 1832, and that they had perhaps only a single meal of another kind once in eight days. That the potatoes had such a disagreeable taste as to be loathed, notwithstanding all the modes of preparation which their ingenuity could devise for rendering them more palatable. That in a few days after using them, the whole family were seized with severe griping pains in the bowels, followed by diarrhœa of a green watery kind. That these bad effects continued with short intervals during the whole time that the potatoes were used, but that the children had not experienced them so severely or so constantly as the parents, which circumstance was accounted for by their occasionally getting a crust of bread from some of the neighbors.

To what extent the unwholesome food just described may have concurred with *scarlatina* in producing the effects detailed in Cases I. and II. I am not prepared to say; but that a noxious influence must necessarily have been exerted by it on the constitutions of the patients, and consequently have disposed their systems to diseased action, particularly to that of dropsical effusion, I think is very obvious.

In the case of Agnes Clapperton, however, it seems exceedingly probable that the bad potatoes were the sole exciting cause of dropsy. Being aware that a dropsical tendency is often shown after very slight attacks of *scarlatina*, my inquiries in this case were repeated and strict; but I was uniformly and positively assured, that although A. C. labored under slight diarrhœa in consequence of the potatoe diet still in use, while her brother and sister had the scarlet fever, she had neither sore throat, nor rash, nor anything which could in the smallest degree indicate the existence of that disease in her person. The parents, too, could scarcely be deceived if any symptom of the fever had been present, having so simple and decisive a test to guide them, as comparison with the appearances exhibited by the other two children.

What gives additional strength to this opinion is the fact that the same effect has often been produced by the same cause—namely, dropsy from frozen surface potatoes, in the case of horses and cattle. I have examined several individuals connected with farms in different districts of the country, and they all agree that feeding cattle or horses even for a very short time on such potatoes, unless plenty of *fodder* was given along with them, would inevitably generate dropsical effusion. In some districts, to avoid the dreaded evil, the cattle, being principally of the milch kind, are never allowed such food; the horses only get it in sparing quantities; but the swine, which are supposed incapable of being injured by vegetable productions, however rank and corrupt, are permitted them in an unrestricted abundance.

A Banffshire informant states, that in his part of the country cases of dropsy among the cattle in particular are very frequent, owing to the use of these potatoes, without a sufficient accompanying proportion of other

food. He represents the deleterious influence of them on the animal to be shown, first, by the presence of griping, evinced by tossings of the head, movements of the legs, especially the hind ones, and rolling on the ground; secondly, by severe frothy purging; then by difficult respiration; and lastly, by serous effusion, which proves speedily fatal if strong purgatives, diuretics, and the last resource, namely tapping, are not successful.

Striking points of analogy cannot fail to be observed between the facts mentioned in the above statement and in those in the case of Agnes Clapperton. Previous to the dropsy, she had the griping and purging to a considerable extent, but certainly not by any means so severe as her father and mother; a circumstance which may perhaps explain the cause of their immunity from dropsical effusion; for it does not seem an unlikely supposition, that, had nature made the same efforts in her case to throw off the poisonous matter, she too might have escaped the fatal disease.

I may here mention, however, that her father had a most unhealthy, feeble appearance; and her mother looked even worse, had various complaints, and among the rest had an abortion of a fourth-month pregnancy, all which ailments were not improperly attributable to her late unwholesome mode of living.

With regard to the manner in which the potatoes had acted in generating dropsy, and the appearance exhibited by dissection, I will not pretend to give a decided opinion.

Indigestible substances taken into the stomach, and improper modes of living, have by several authors been admitted as the cause of dropsies. Venables, in his Clinical Reports, p. 14, considers such causes as undeniable, and states a case of dropsy occurring from the use of fat bacon and cheese.—Dr. Ayre, and several other authors, give cases both of *hydrothorax*, *ascites*, and *anasarca*, occurring separately and in conjunction, from indulgence in what are called the pleasures of the table, and the immoderate use of fermenting liquors. In such cases as these, the disease must have originated in consequence of general debility, produced by the imperfect assimilation and conversion of aliment into chyle; by the scanty proportion of nourishing matter taken into the blood; and by the enfeebled condition of the whole vascular system from the existence of long-continued gastro-intestinal irritation. Now, though the unwholesome potatoes so often referred to might not give rise to dropsy, by any specific operation, they must have affected the system in the way that other indigestible substances would do.

The mass of disease found in the mesenteric glands of Agnes Clapperton may throw some light on the pathology of her case. It is well known that bad food is one of the great causes of such degenerations; and in her case, where the structure of the glands was so much diseased, it was impossible that the fluids could circulate freely; and perhaps the fluid resembling pus observed in so great quantity in some of the glands was in reality obstructed chyle. Dr. Ayre, p. 8, states a case of ascites proceeding from mesenteric disease, and remarks, that inflammatory action is propagated from the glands to the serous membrane investing them;—"whence, as from a point, it gradually spreads along the mem-

branous duplicature of the cavity."—In the case of Agnes Clapperton, a similar diffusion of inflammatory action may have taken place.

Edin. Med. and Surg. Journal.

UTERINE HEMORRHAGE.

[Communicated for the Boston Medical and Surgical Journal.]

Few diseases are more embarrassing to a physician, or more alarming to the patient, or really more dangerous to life, than Uterine Hemorrhage during pregnancy. Whether the discharge be small or profuse, it is almost equally dangerous. If small, and considered hardly worthy of attention by the patient or her friends, it may be suffered to go on unheeded till the vital fluid is so much exhausted as to bring danger in the extreme at the last. If profuse at first, we have often an opportunity to witness the impotency of medicine for its suppression and removal; and even if it ceases for a time, it will only prepare the patient for still greater danger by its sudden and profuse return.

To the young physician, the various remedies prescribed by the best practitioners seem adequate to effect a cure in the worst cases; but they find, by experience, that the disease is rather protracted than cured by them. The discharge may be lessened for a time, but will return from the slightest cause. Acetate of lead, with opium, when admissible, is a powerful remedy in uterine hemorrhage—so is also the sulphate of copper dissolved in vitriolic acid, and largely diluted. In some cases *capsicum* produces very favorable effects. The tampon is also many times indispensable, to gain time and produce a temporary suspension of the discharge. After all that can be done, however, few cases escape without abortion at last. If pain accompanies the hemorrhage, the probability of an abortion is greatly increased. If the liquor of the amnion is discharged, it is certain. There is notwithstanding, however, a discharge of fluid from the uterus, some time previous to labor, which has been mistaken for the liquor of the amnion. This is probably from a collection between the two membranes; as in such cases, when labor does come on, the membranes always appear sound and the waters are retained.

For 25 years, the writer has prescribed the powerful remedies above noticed in uterine hemorrhage accompanying pregnancy—enjoining perfect rest, a bland diet, and sometimes, though rarely, bleeding. Very few have escaped abortion, and abortion has occurred often under the most unfavorable circumstances—the system being exhausted by hemorrhage, and the patient worn down by anxiety and alarm. In cases of uterine hemorrhage during pregnancy, I have for a long time pursued the following course of treatment:—Enjoin perfect rest in all cases; direct that the diet should be spare, or, if more generous, to be given in small quantities often repeated; prescribe the lead and opium, or the sulphate of copper. If I suppose there is any chance of suppressing the hemorrhage, make cold applications to the bowels, and sometimes use the tampon. In cases where the hemorrhage is profuse and the patient sinking, I prescribe no remedies, unless it be cordials and nourishment, but proceed immediately to rupture the membranes and give the ergot.

In cases where the symptoms are urgent, no time should be lost, but recourse should be had directly to this practice. The same should be done if pains accompany the hemorrhage, or if the waters are discharged. *There is no safety for the patient till delivery be effected.* It is often matter of surprise how soon hemorrhage will cease under this course. If it does so, the case may be left to go on, the delivery will be effected, and all danger will cease, without any extraordinary interference. Should the case be mild and danger not urgent, it is proper always to make trial of other remedies at first. But it is a maxim with me, not to delay till very considerable exhaustion takes place, and that it is better to proceed too early then defer till too late.

In the early months of pregnancy it is matter of importance that the envelope of the fœtus be brought away, and the accoucheur should never wholly quit his patient till he is satisfied that nothing is left in the uterus. It would be difficult for me to say how many cases I have been called to visit with profuse and dangerous hemorrhage after abortion, in which upon examination I have found the membranes and placenta distending the mouth of the uterus. I have often removed them a week or a fortnight after miscarriage, in the highest state of putrefaction, when high irritation, chills, and fever, had been produced; all which, with the hemorrhage, subsided as soon as the offending cause was removed. But when the secundines have been suffered to remain and putrify, a long and dangerous illness has succeeded, with hemorrhage and fever, and excessive irritation, followed by hectic, marasmus, cauliflower excrescence, or carcinoma, and death. Many such cases prove fatal, nearly all of which might be saved if the symptoms which preceded them were attended to in season. If the secundines cannot be removed at the time of the abortion, they can be at some subsequent period, as they are always sooner or later to be found in the mouth of the uterus; and the accoucheur should always continue his attendance upon the patient till he is satisfied that nothing remains in the uterus—making occasionally an examination, till the envelope presents itself within the reach of the finger, and then removing it without delay.

While speaking on the subject of uterine hemorrhage, I will suggest for a trial, to those who have never used it, the use of alum in substance per vaginam. I have used it most frequently in cases of hemorrhage after labor or abortion, and in menorrhagia. I have seen the best effects from its use. It acts powerfully, and in most cases almost immediately. My method is to take a piece of alum as big as a large nutmeg, and often twice as large, make a hole through it, smooth its surface, attach a cord to it, and introduce it into the vagina; let it remain till it irritates and produces uneasiness, and then remove it. After a while, if necessary, it may be again applied, and repeated as often and as long as needed. I have used it daily for weeks, and have found it more effectual than any other remedy. I have also used it in obstinate and protracted cases of leucorrhœa, with the most decided benefit, conjoined with internal remedies, as cubebs, nitrate of silver, tinct. lytta, and tonics and astringents. A case of leucorrhœa, of 15 years standing, has been cured by it. This patient had been confined to the bed more than half the time for that period. In such cases, when the patient is able to walk about, I introduce

it on going to bed. If it produces much irritation it will wake the patient, and can then be removed. If not, it may be suffered to continue till morning. I am disposed to think well of its use in prolapsus of the uterus, but have not tried it in cases of that character. I have in no instance seen any injury from its application. If continued too long, it will produce some irritation, which subsides when it is removed.

Cases.

Mrs. G. was pregnant for the fifth time. At the end of three months she had an abortion, attended with considerable hemorrhage. The hemorrhage continued, and the secundines were doubtless retained, as a most fetid discharge took place from the vagina, which lasted five or six weeks. For a long time afterwards, the least exertion would produce hemorrhage. She was confined to her bed six months; was pale, extremely feeble, and had great nervousness and irritation. I visited her, for the first time, three months after the abortion, before which she had had no advice except that of a female midwife. I gave her tonics, astringents and narcotics, for some time, used astringent injections into the vagina, and enjoined perfect rest and generous diet. The hemorrhage still continued, with little or no abatement. The tincture of guaiacum, the muriated tincture of iron, and the cornus Florida, amongst other remedies, were used for some time, without particular benefit.

I now resolved to make use of the alum in substance. It was my first trial of it. After the first introduction of the alum, the discharge ceased in the course of one hour entirely, and did not return. Till this time no day had passed for six months without more or less hemorrhage. The iron, guaiac. and cornus were continued. At the end of four weeks the discharge returned. At first it was like the menstrual visitation, but after one or two days it became a profuse hemorrhage. The alum was again tried, and again succeeded in the same manner as before. The hemorrhage did not return. Mrs. G. regained her health and strength after some time, and has since borne living children.

Mrs. S. was attacked with blind hemorrhage and collapse of the uterus, after labor which was both natural and easy. In the hurry of the moment a large bit of alum was introduced into the vagina and left. Hemorrhage ceased, and she recovered from a state of apparent death. In the morning following, I informed the nurse and patient that a piece of alum was introduced and must be removed. They both concurred in the statement that it had passed off. No hemorrhage followed its use. Forty-eight hours afterwards, a discharge took place from the vagina, irritating and excoriating the parts with which it came in contact, and producing pain and distress. After it had continued some time, I was called in. I immediately suspected that some mistake had arisen respecting the alum. I made an examination, and found the alum, reduced to half its original size. The vagina was corrugated and contracted, so as hardly to admit the finger. I directed a linseed injection, and no bad consequences followed. The mistake arose from part of the alum flaking off. I state this case to show that no danger arises from a long-continued use of the alum, although I have directed that on the recurrence of any irritation it should be removed.

To show the importance of attending to cases of abortion where the accoucheur has not seen the fœtus and envelope, I relate the following cases.

Mrs. K. had an abortion at the third month. Hemorrhage continued, although the midwife persisted that all that was necessary had been discharged. By the continued hemorrhage, the patient was reduced to the greatest extremity, and a messenger was despatched for me. I found Mrs. K. in a very dangerous state of faintness and exhaustion. I proposed an examination. It was opposed by the patient and midwife most strenuously and obstinately, as being of no avail and of no possible benefit, as *everything was discharged*. I insisted on the examination, being satisfied that the secundines were retained. With reluctance they consented. I removed the ovum with much difficulty. The hemorrhage immediately ceased, and the patient recovered rapidly.

Mrs. B. had had an abortion six or seven days previous to my being called, with considerable hemorrhage. The hemorrhage did not cease, and was always profuse upon exercise. I removed a putrid ovum from the os uteri; the hemorrhage ceased, and the patient was well in a few days.

Mrs. W. had an abortion in one of the early months of pregnancy. No advice was called for till twelve or fourteen days had elapsed. I was then called in. Hemorrhage had continued from the first. She was faint, feeble, and could not assume an erect posture. For some days previous to my visit, she had a fetid discharge, and her room was most offensive. She had severe agues daily, followed by smart fever; her strength was much reduced, and she was getting worse daily. I removed the most putrid mass of envelope that I had ever seen or could conceive of. Every individual left the room, myself with the rest. She had no return of hemorrhage, ague, or fever; in two days had appetite, and recovered surprisingly fast.

Mrs. W. had an abortion in the third month. The accoucheur pronounced that *all was removed from the uterus*, and that the hemorrhage would soon cease. The patient, however, sunk into the most dangerous state of collapse and faintness; hemorrhage was profuse as soon as she revived, and she was repeatedly supposed to be dying. I was summoned in great haste. I found the countenance, lips, tongue and extremities, pale and bloodless; no pulse was perceptible in the wrists; respiration was but a repeated sighing, and she was supposed by her friends to be in the very act of dissolution. I directed clear brandy to be given her freely, and I introduced my hand into the vagina and removed the empty ovum. The hemorrhage ceased, the faintness gradually subsided, and the patient recovered after some time, having been apparently nearer death than any individual I had ever seen, except Mrs. S., Case 2.

Mrs. W. had an abortion early in her sixth pregnancy. Hemorrhage was profuse, but an inexperienced accoucheur, who was present, pronounced that all was well. She continued to have flooding, was weak, and inclined to faintness. These symptoms continued some days, when of a sudden a profuse and dangerous hemorrhage occurred. I was immediately called in, and found her extremely exhausted, without pulse, irregular respiration, and great anxiety and distress. I gave her cor-

dials, and introduced my hand and removed the putrid and offensive envelope from the os uteri. Hemorrhage ceased. A dangerous fever occurred, from which she gradually recovered. Two years afterwards, she was again pregnant, and during the seventh month she was attacked with hemorrhage. Greatly alarmed, she immediately sent for me, and insisted she should never go through her former dangers and survive them. I bled her, and enjoined perfect quiet and recumbent posture, as the hemorrhage was very slight, with the hope that it would subside without danger. Ten hours afterwards I was again called in, and found the flooding very considerable, attended by faintness and symptoms of exhaustion. There was no pain, no symptoms of labor. I immediately introduced my finger into the os uteri, which was slightly open, and with some difficulty ruptured the membranes. I gave her ergot, also. In 20 minutes the peculiar pains of ergot commenced, followed by regular uterine efforts. Hemorrhage almost immediately ceased, the labor was completed in two hours, and she recovered as well as usual after her confinements.

Mrs. F. was attacked with profuse hemorrhage at the commencement of the last month of pregnancy. It immediately ceased. I bled her, and enjoined perfect rest and recumbent posture. She but badly obeyed my directions, continuing to walk about. Hemorrhage would return at a dash, and again cease entirely. In this embarrassing situation I prescribed the most powerful astringents, lead, opium, sulphate of copper, &c. Still the hemorrhage would recur, and finally became so profuse, and returned so frequently, she reluctantly gave her consent that I should adopt any course which I thought would save her life. She had no symptoms of labor. I made an examination, and found the os uteri slightly dilated; ruptured the membranes with my finger, and gave her the ergot till it produced its peculiar effects. Her pains soon became regular, and in the course of two or three hours the child was born living, and the placenta followed. No hemorrhage of any consequence took place after these means were made use of and labor came on.

Mrs Smith, aged 30, was pregnant of her first child. Early in the ninth month she was attacked with hemorrhage, which was very considerable the first day. I saw her 12 hours after the attack. I enjoined perfect rest, low diet, and some astringent and anodyne medicine. The hemorrhage diminished, and nearly ceased by the fourth day. The os uteri was but little dilated; but from the imperfect examination I could make, the placenta was attached near the os uteri, but not over it. On the night of the sixth day from the attack, the flooding recurred with considerable violence, and she complained of faintness and loss of strength. I visited her on the following morning; her pulse was feeble, her countenance pale, and she was considerably enfeebled. I determined to bring on artificial labor, and accordingly ruptured the membranes and gave the ergot. The pains came on as usual, soon became regular, and the hemorrhage ceased. The os uteri soon became dilated, and the head presented to the upper strait of the pelvis. She was occasionally faint, and the pains would at intervals almost subside, and then again recur and be considerably efficient. On the whole, but little progress was made, and at 8 o'clock in the evening the head had not passed far into

the pelvis. An eminent accoucheur now saw the patient with me, and it was concluded to give small doses of laudanum, moderately of wine, and good liquid nourishment, and wait the event. At 9 o'clock, after he had left, profuse hemorrhage came on, and discharged freely all around the head. Fearing that blind hemorrhage had taken place, as faintness and the smallness of the pulse indicated, I determined to effect delivery, to save the life of my patient, which I considered in imminent danger. Turning was impracticable; applying the forceps very difficult, and none were at hand; and as I had no doubt of the death of the child, I concluded to lessen the head. This done, the labor was soon completed, the afterbirth followed without difficulty, and no hemorrhage recurred. Mrs. F. did well for four or five days, then had a mild fever, from which she soon recovered.

Mrs. P. was pregnant of her second child. About the eighth month, while she was preparing to keep the annual Thanksgiving at her father's house, she was attacked with profuse and dangerous hemorrhage. She fainted, was got into bed, and a messenger was despatched for me. I arrived in an hour. The bed was deluged with blood; the patient lay cold, pale, nearly insensible; the lips and tongue colorless, and the pulse hardly perceptible. Upon examination I found the os uteri nearly closed, the neck not obliterated, and very little signs of labor. The hemorrhage was attended with great faintness, sickness, and prostration. I gave the ergot, but no effect followed. I gave a tablespoonful of an equal mixture of spirit and water every 10 or 15 minutes, and hot broth well peppered. Finding the hemorrhage continuing, I introduced my finger and ruptured the membranes. After a while the peculiar pains of ergot came on, the hemorrhage ceased; the pains soon became regular, the labor progressed, the os uteri dilated, and a dead fœtus was expelled in about four hours. Large dark coagula followed immediately, and the placenta was in the vagina—showing that it had been separated and caused the hemorrhage. The woman continued comfortable.

Mrs. F. had uterine hemorrhage in the eighth month of pregnancy. It was slight at first, but increased, and continued 12 or 14 days. When I was called to see her, she was very feeble, her pulse frequent and very small, and I considered her in the utmost danger. The tampon was applied, powerful astringent medicines were used, and perfect rest enjoined. One of the most alarming symptoms of this case was a perfect indifference and unconcern about her situation, and a disposition to neglect my advice and continue exercise. I left her, requesting to be called in immediately if flooding returned. By the importunity of friends she kept her bed through the day, but at night she insisted upon sitting up to tea with her friends. While making this exertion, the hemorrhage returned and was profuse through the evening. She declined sending for me, as no symptoms of labor appeared. At 11 o'clock an alarming fainting-fit came on, with spasm, loss of sense, and great coldness. Her husband, who had been absent, but fortunately just arrived, came immediately to me and stated the condition in which he had left her. I hurried to the house; found the patient lying gasping for breath, pale, exhausted, without pulse in the wrist, and with a respiration of repeated sighing. I apprised the husband and friends of her danger, despatched

a messenger for counsel, and immediately gave her wine and cordials, with good liquid nourishment. I made an examination, but found little dilatation of the os uteri. The placenta was attached over it, and there was no pain. Never in my life was I placed in more embarrassing circumstances. I gave the ergot, continued the cordials, and was happy to find some effect upon the uterus. With all possible effort to dilate the os uteri and introduce my hand, I succeeded at last to reach the feet, and turned the child. Hemorrhage now ceased. It had been enormous; the bed was deluged with blood. When it ceased, the most alarming faintness and coldness came on, and for a long time I supposed the patient would not survive the delivery. We gave cordials as fast as it was possible for her to swallow. The uterus made an effort every time she revived from the faintness; but as there was no flooding after the introduction of the hand, I proceeded, with great caution and deliberation, in the delivery, assisting the feeble efforts of the uterus, fearing that a fatal collapse would follow the birth of the child. No hemorrhage followed the introduction of the hand, the delivery was soon completed, the placenta came away without difficulty. The paroxysms of faintness continued to recur. Notwithstanding the most free and liberal use of stimulants, with some opium, the warmth was in no degree restored, the pulse did not return, and she finally sunk exhausted and expired.

This case, with one that occurred not long after, in which I was called in counsel at the moment of death, taught me an important practical lesson, which may have been the means of saving other lives since. It is, *never to rest easy concerning a patient with uterine hemorrhage till delivery is effected, and always bring on artificial labor and delivery before the patient is exhausted.* Since I have adopted this practice, I have lost no case from uterine hemorrhage, and my patients have not suffered such imminent danger and hazard of life as when the case was left to nature. The propriety of using the ergot, when the placenta is attached to the os uteri, may be questioned. Upon much reflection and some experience, however, I am satisfied it is correct practice. If it produces any effect, it will facilitate the distension of the os uteri, which is found often surprisingly rigid, even when the patient is much exhausted. And this rigidity is not the worst condition in which the os uteri is found: A relaxed state is sometimes observed, without dilatation, when by the finger you can stretch the os uteri to any extent. You then have a feeble and relaxed condition of the uterus, upon which little dependence can be placed to assist the labor, and little hope of a healthy contraction after the birth of the child, upon which the safety of the patient alone depends; and the accoucheur should never leave his patient till by friction and stimulants he is able to produce the contraction necessary, which may always be known by examining the uterine tumor through the parietes of the abdomen. W.

Aug. 15, 1833.

EFFECT OF AGE ON ERGOT.

To the Editor of the Boston Medical and Surgical Journal.

Sir,—I am induced to send you this communication, by observing the following question asked by one of your correspondents, in No. 16 of Volume VIII. of the Journal—"Does ergot lose its efficacy if kept over the year?"

When I commenced the practice of my profession, ten years since, I purchased an ounce of unpulverized ergot. Finding it upon trial very hard to pulverize, I left it in a state of coarse powder, put it into a corked vial, and purchased another ounce of the apothecary already pulverized. During the present season, having no other ergot on hand, I was induced to make trial, in two cases, of that which I had had by me for ten years; and I found it equally effectual with the same medicine in a more recent state. Having a case of midwifery, the present month, in the course of which it became necessary to use either ergot or the forceps, I concluded to make trial, in the first instance, of the ergot which I had kept for ten years, and gave the patient about thirty grains, which produced constant and powerful uterine efforts for two hours, until the child was expelled. The above experiments prove to my own mind, conclusively, that ergot does not in general lose its virtue by age.

E. Woodward.

Quincy, August, 1833.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, AUGUST 21, 1833.

SMALLPOX AT SALEM.

A brief notice of some cases of smallpox which occurred at Salem in June and July, has appeared in the public papers. Some singular circumstances then mentioned, respecting the origin of these, led us to make further inquiries, and we have in consequence been favored with the following interesting facts, collected by Dr. B. Cox, jr. Quarantine Physician at that port.

Caverly, the first patient, arrived in Salem from Middleton on Wednesday, June 12. The eruption was first noticed on the 13th, and was seen by several physicians. At first there was some hesitation in admitting the real nature of the case, from the apparent absence of any facts to explain its occurrence. The patient stated that he had been subject to severe eruptions from poisoning by ivy. He had never to his knowledge been in any manner exposed to smallpox. He had not been out of Middleton for more than a month (the time stated is supposed to be six weeks), previous to his sickness. During the whole of this time, he was employed in working as a carpenter on the new mill. He had never handled any rags in the paper mill that he recollected—did not often go into it. Several weeks before he came to Salem, he made a pen or box in the paper mill for holding rags. While employed about this he cut his finger, and dressed it with a rag taken from a heap near him. He could not recollect the precise time when this happened, but thought it

could not have been less than three weeks before his sickness. Dr. C. examined the finger, and found the wound entirely healed—there was no pustule on that spot. He had never been vaccinated.

Hall and Cate lived in the same house with Caverly. They were frequently in his room, and performed several little kindly offices for him; thus, one held the bowl when he was bled, the other the vessel when he vomited, &c. On the 27th the varioloid manifested itself. On the 29th they were removed to the Hospital. These two persons were vaccinated on Monday, 17th; that is, on the sixth day after Caverly came to their house. The vaccine disease went through its usual course with perfect regularity. Dr. H. vaccinated successfully a number of persons with matter taken from Hall's arm on the 8th day, two days only before the varioloid appeared.

The next patient was Paysley. Mild smallpox. This man boarded in the same house with Cate, &c. Being naturally very taciturn and reserved, he associated but little with the other inmates. He was wholly unacquainted with Caverly, and was in his room a few minutes only on the 13th. He did not see him again till he met with him at the Hospital. He was removed on Monday, July 1st, the same day that his eruption appeared. Paysley was vaccinated several years ago by an unprofessional man in the country. A few days after it was done, he (to use his own expression) "scratched it out because it itched and plagued him in his work."

Critchet, the next patient, lived in Peele's building, on the bridge. He assisted in removing Caverly on the 16th. His eruption appeared some time after 10 o'clock, Monday night. He was sent to the Hospital the next morning, July 2d. Critchet had likewise been vaccinated by an unprofessional man in the country. The scar on his arm was very slight and imperfect. This case was mild smallpox.

Cate, the father to the patient above alluded to, was visiting his son when Caverly came from Middleton, and was vaccinated at the same time with him. He left Salem on Monday, June 17th, and returned to New Hampshire. His eruption appeared on the 27th. He died on the 13th July. His vaccination was not successful.

This account may be relied on as authentic, all the details being given by the quarantine physician.

MEANS OF ARRESTING HEMORRHAGE FROM WOUNDED ARTERIES.

Dr. DAVY has published, in the Edinburgh Journal for July, the result of some investigations made by him into the virtues of an article called the Aqua Binelli, which had enjoyed a high reputation in Italy as a styptic. The properties ascribed to this liquid partook, indeed, in no slight degree of the marvellous, as it was said to arrest both internal and external hemorrhage, and to check bleeding from the largest arteries. A sample of this wonderful article having been sent to Dr. D., he made trial of it as a styptic in some slight external wounds, and finding that it had no effect whatever, decided at once that it was a mere imposition. From its chemical and physical qualities he also came to the conclusion that it was prepared by the distillation of water from petroleum, or some species of tar.

Some time afterwards, his attention was again attracted to the subject by the invitation of a practitioner in Naples to witness the exhibition of some experiments with an article which closely resembled this far-famed

water, and shared its wonderful virtues. The experiment consisted in the partial division of the carotid artery of a goat, the bleeding of which, it was said, could be stopped by means of the fluid. Accordingly, the vessel was divided through about half its circumference, and poured forth a most copious bleeding. Cloths dipped in the styptic were immediately applied one over the other, and secured by rolling a bandage about the neck, making moderate pressure on the wounded vessel. A little oozing of blood followed, which soon ceased. At the end of three hours, the compresses were removed in order to test the efficacy of the remedy, when immediately the bleeding re-commenced with the same violence. On examining the last compress removed, a coagulum was found adhering to its surface, of precisely the size of the wound in the artery; by means of which the bleeding appeared to have been checked, and to have re-commenced on its removal.

"Reflecting on this result," says Dr. D., "and considering the chemical nature of the fluid employed to moisten the compresses, which appeared analogous to that of Binelli, the conclusion was obvious, that had the compresses been dipped in common water the effect would have been the same; and it also appeared very probable, that had the compresses been allowed to remain undisturbed, there would have been no renewal of the bleeding."

In conformity with this idea, the experiment was tried of partially dividing the carotid arteries of two dogs, and then covering the wounds with compresses moistened with water used after the same manner as the liquid above described. In both, the hemorrhage was arrested. One died at the end of seven days from some unknown cause, and on examination, the vessel was found quite pervious, not in the least contracted. The wound in the external fibro-cellular coat was found closed by dense coagulable lymph. In the middle and internal coat, there was still a gaping aperture, across which, on minute inspection, two fine threads, apparently of lymph, as if the commencement of the healing process, were observable.

The other dog was larger and suffered less from the wound. The bandage and compresses were removed on the eighth day. Five days after, the external wound was nearly healed. A portion of artery including the wound was removed from between two ligatures. On examination, this portion was found free from coagulable lymph. A very minute elevation, about the size of a pin's head, appeared on the side of the wound. The artery was completely pervious, and not at all contracted.

Dr. Davy dwells at some length on the interesting nature of these facts, and on the possible application of the principles they develope to the practice of surgery. We shall not follow him in these reflections, deeming it sufficient to have submitted the most important facts contained in the paper to the attention of such of our readers as may not meet with them in their original form. Many facts, which are scattered through the records of surgery, seem to point at the probability of a more simple and effectual mode of treating injuries, involving wounds of large vessels, than is at present employed. We have seen the fact asserted of a German practitioner, who had performed numerous amputations, that he never was under the necessity of applying a ligature to an artery. The new mode of securing vessels adopted by Amussat, though on a different principle from that under consideration, is another evidence of the attention which is already given to this subject, and we cannot but believe that at no distant period it will receive a thorough and systematic investigation.

On Œsophageal Vomiting.—Dr. Marshall Hall writes thus to the Editor of the London Medical Gazette :—I have recently had an opportunity of watching, with Mr. Brodie, the effort to swallow, and the effort to vomit, in a patient with total obstruction at the cardia.

The effort to swallow was not to be distinguished from that in health ; nor could the patient detect any difference, until the œsophagus being completely filled, the fluid ceased to descend beyond the pharynx, and flowed out of the mouth.

The effort to vomit was also perfectly similar to that which takes place in health : the larynx was closed, an effort of expiration was forcibly made, and the fluids in the œsophagus were expelled as in ordinary vomiting.

The stomach-tube was introduced repeatedly. Whenever it reached the cardia, and so extended the œsophagus, an effort to vomit uniformly took place, as in the experiments of Legallois ; at the same moment the fluids contained in the œsophagus were forcibly expelled through the tube.

The whole of the phenomena in this case afforded an interesting confirmation of the views I had published on the Mechanism of the Act of Vomiting, which were copied in the Medical Gazette for April 2, 1828.

In ordinary vomiting, the abdomen and thorax become as one cavity, the intervening diaphragm floating perfectly loose and inert between them, whilst the cavity of the stomach and of the œsophagus become equally one, by the free opening of the cardia ; an *effort of expiration* then takes place, and the stomach is evacuated through the œsophagus.

Short-Windedness in the Horse.—This affection is generally dependent upon pulmonary emphysema, either of the vesicular or the interlobular kind. The French veterinary surgeons employ the stethoscope with great advantage in their practice ; the feebleness of the respiratory murmur, the friction sound, the crepitant and sibilant râles, along with strong resonance of the chest on percussion, are the diagnostic marks of pulmonary emphysema in the horse, as in man. According as these signs are heard over a great or small extent, so is the disease to be considered general or local.—*Medico-Chirurgical Review.*

Precocity of Development of the Genital Organs in an Infant.—In this infant, at the time of its birth, the mammæ were unusually large, and the mons veneris "garni" with hair. At 3 years of age the catamenial discharge appeared, and has continued regularly to the present time, a period of 18 months.—*Gazette Médicale.*

Two or three interesting communications are acknowledged, and will appear in our next.—We are greatly obliged to W. for his highly valuable and practical contributions to our pages, and trust he will still continue his favors to us, and through us to the profession and the public.

Whole number of deaths in Boston for the week ending August 16, 44. Males, 21—Females, 23. Of dropsy on the brain, 2—consumption, 10—infantile, 3—dropsy in the chest, 2—teething, 2—hooping cough, 1—quinsy, 1—fracture, 1—diarrhœa, 2—complication of diseases, 1—bursting blood vessel, 1—old age, 4—debility, 1—typhous fever, 2—scarlet fever, 1—lung fever, 1—inflammation of the bowels, 1—delirium tremens, 1—unknown, 1—canker in the bowels, 1—bowel complaint, 1—cholera morbus, 1—croup, 2—dysentery, 1—bilious fever, 1.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, *Post-paid.* It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price $3,00 per annum in advance, $3,50 if not paid within six months, and $4,00 if not paid within the year.—*Postage the same as for a newspaper.*